L19

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(FILE 'USPAT' ENTERED AT 14:13:51 ON 22 AUG 1998)
     FILE 'USPAT, USOCR, EPO, JPO' ENTERED AT 14:16:05 ON 22 AUG 1998
     FILE 'USPAT'
             15 S NONDIGESTIBLE (2A) COMPOSITION#
L1
     FILE 'USOCR'
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L2
     FILE 'EPO'
              7 S NONDIGESTIBLE (2A) COMPOSITION#
L3
     FILE 'JPO'
              0 S NONDIGESTIBLE (2A) COMPOSITION#
T.4
     TOTAL FOR ALL FILES
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L5
     FILE 'USPAT'
              1 S L5(P)SHEARING
L6
     FILE 'USOCR'
              0 S L5(P)SHEARING
L7
     FILE 'EPO'
              0 S L5(P)SHEARING
Г8
     FILE 'JPO'
              0 S L5(P)SHEARING
L9
     TOTAL FOR ALL FILES
              1 S L5(P)SHEARING
L10
     FILE 'USPAT'
              1 S L5 AND SHEARING
L11
     FILE 'USOCR'
              0 S L5 AND SHEARING
L12
     FILE 'EPO'
              0 S L5 AND SHEARING
L13
     FILE 'JPO'
               0 S L5 AND SHEARING
L14
     TOTAL FOR ALL FILES
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L15
=> s 115 and (shear or sheared)
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          14376 SHEARED
              1 L11 AND (SHEAR OR SHEARED)
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FILE 'EPO'
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           1058 SHEARED
              0 L13 AND (SHEAR OR SHEARED)
L18
FILE 'JPO'
           6279 SHEAR
           1195 SHEARED
              0 L14 AND (SHEAR OR SHEARED)
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TOTAL FOR ALL FILES L20 1 L15 AND HEAR OR SHEARED)

=> d 120 1 hit

US PAT NO:

5,422,131 [IMAGE AVAILABLE]

TITLE:

Nondigestible fat compositions containing

relatively small nondigestible solid particles for

L20: 1 of 1

passive oil loss control

(FILE 'HOME' ENTERED AT 14:31:39 ON 22 AUG 1998)

FILE 'CAPLUS, WPIDS' ENTERED AT 14:32:10 ON 22 AUG 1998

11 S NONDIGESTIBLE (2A) COMPOSITION#

1.1 0 S L1 AND (SHEAR OR SHEARED OR SHEARING) 1.2

=> d l1 1-11 ibib ab

ANSWER 1 OF 11 CAPLUS COPYRIGHT 1998 ACS

ACCESSION NUMBER:

1996:483878 CAPLUS

DOCUMENT NUMBER:

PATENT ASSIGNEE(S):

125:141175

TITLE:

Nondigestible fat compositions

containing solid polyol polyester polymer for

passive oil loss control

INVENTOR(S):

Corrigan, Patrick J.; Howie, John K.

USA

SOURCE:

U.S., 18 pp. Cont.-in-part of U.S. Ser. No.

968, 791, abandoned.

CODEN: USXXAM

	NUMBER	DATE
PATENT INFORMATION: APPLICATION INFORMATION: PRIORITY APPLN. INFO.:	US 5534284 A US 94-301947 US 92-968791	960709 940907 921030
DOCUMENT TYPE:	Patent	

LANGUAGE: English

Nondigestible fat compns. useful as replacements for triglyceride fats or oils in foods are disclosed. These compns. have relatively flat solid fat content (SFC) profile slopes between typical room temp. and body temp. The nondigestible fat compns. comprise a liq. nondigestible oil and nondigestible solid polyol polyester particles dispersed in the oil in an amt. sufficient to control passive oil loss. The solid polyol polyester particles of the compn. herein comprise from about 10% to 50% polyol polyester polymer and from 50% to about 90% polyol polyester monomer. The polyol polyester material which forms these solid particles must contain a relatively high proportion of long chain satd. fatty acid ester groups. Edible fat-contg. products comprising these nondigestible fats can be less waxy tasting due to the lower level of solids required for passive oil loss control.

ANSWER 2 OF 11 CAPLUS COPYRIGHT 1998 ACS

ACCESSION NUMBER:

1995:964874 CAPLUS

DOCUMENT NUMBER:

124:28687

TITLE:

Nondigestible fat compositions

containing cocrystallized blend of polyol polyester hardstock and crystal modifier as a

passive oil loss control agent.

INVENTOR (S):

Johnston, Robert W.; Lin, Peter Y. T.; Mead,

Michael L.

PATENT ASSIGNEE(S):

USA

SOURCE:

U.S., 31 pp. Cont.-in-part of U.S. Ser. No.

969,607, abandoned.

CODEN: USXXAM

NUMBER DATE
US 5451416 A 950919

PATENT INFORMATION: US 5451416 A 950919
APPLICATION INFORMATION: US 94-287976 940810
PRIORITY APPLN. INFO.: US 92-969607 921030

DOCUMENT TYPE: Patent LANGUAGE: English

AB Nondigestible fat compns. having relatively flat solid fat content (SFC) profile slopes between typical room and body temps. are disclosed. These nondigestible fat comprise a liq. nondigestible oil and relatively small nondigestible particles dispersed in the oil to control passive oil loss. The nondigestible particles consist of a cocrystd. blend of a nondigestible solid polyol fatty acid polyester hardstock and a crystal modifier (prepn. given) capable of inducing the hardstock to form these relatively small particles. Crystal modifiers are, i.a., sucrose tetrabehenate tetracaprylate, sucrose pentabehenate trilaurate, sucrose hexabehenate dicaprylate, and sucrose hexabehenate dilaurate. Edible fat-contg. products comprising these nondigestible fat can be less waxy tasting due to the lower level of solids required for passive oil loss control.

L1 ANSWER 3 OF 11 CAPLUS COPYRIGHT 1998 ACS

ACCESSION NUMBER:

1994:532720 CAPLUS

DOCUMENT NUMBER:

121:132720

TITLE: Nondigestible fat compositions

containing cocrystallized blend of polyol polyester hardstock and crystal modifier as a

passive oil loss control agent.

INVENTOR(S):

Johnston, Robert William; Lin, Peter Yau Tak;

Mead, Michael Lawrence

PATENT ASSIGNEE(S):

Procter and Gamble Co., USA

SOURCE:

PCT Int. Appl., 74 pp.

CODEN: PIXXD2

NUMBER DATE
----WO 9409640 A1 940511

PATENT INFORMATION: WO 9409640 A1 940511 DESIGNATED STATES: W: AU, CA, FI, JP, KR, NO, NZ

RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT,

LU, MC, NL, PT, SE

APPLICATION INFORMATION: WO 93-US10112 931021 PRIORITY APPLN. INFO.: US 92-969607 921030

DOCUMENT TYPE: Patent LANGUAGE: English

Nondigestible fat compns. having relatively flat Solid Fat Content profile slopes between room and body temps., are disclosed. nondigestible fat compns. comprise a liq. nondigestible oil and relatively small nondigestible particles dispersed in the oil to control passive oil loss. These nondigestible particles consist of a cocrystd. blend of a nondigestible solid polyol fatty acid polyester hardstock and a crystal modifier capable of inducing this hardstock to form these relatively small particles. Edible fat-contg. products comprising these nondigestible fat compns. can be less waxy testing due to the lower level of solids required for passive oil loss control. Liq. nondigestible oil and hardstock was prepd. by completely esterifying sucrose with cottonseed oil and soybean oil fatty acids, resp. A nondigestible fat compn. comprised the above liq. oil and hardstock, combined with a crystal modifier consisting of diversely-esterified sucrose polyester (sunflower/C22), prepd. by a modification of the U.S. patents 4,518,722 and 4,517,360.

ACCESSION NUMBER: 1994:507066 CAPLUS

DOCUMENT NUMBER: 121:107066

TITLE: Nondigestible fat compositions

containing diversely esterified polyol polyesters for passive oil loss control

INVENTOR(S): Corrigan, Patrick Joseph; Howie, John Keeney;

Lin, Peter Yau Tak

PATENT ASSIGNEE(S): Procter and Gamble Co., USA

SOURCE: PCT Int. Appl., 39 pp.

CODEN: PIXXD2

PATENT INFORMATION: WO 9409639 A1 940511

DESIGNATED STATES: W: AU, CA, FI, JP, KR, NO, NZ RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT,

LU, MC, NL, PT, SE

APPLICATION INFORMATION: WO 93-US10111 931021 PRIORITY APPLN. INFO.: US 92-968780 921030

DOCUMENT TYPE: Patent LANGUAGE: English

Nondigestible fat compns. useful as a replacement for triglyceride fats or oils in foods are disclosed. These compns. have relatively flat Solid Fat Content (SFC) profile slopes between typical room and body temps. The nondigestible fat compns. comprise a liq. nondigestible oil and nondigestible particles of solid polyol polyester material dispersed in the oil in an amt. sufficient to control passive oil loss. The ester groups of the solid polyol polyester material comprise: (i) at least about 15% ester groups formed from C20-C26 long chain satd. fatty acid radicals, and (ii) ester groups formed from fatty or other org. acid radicals which are dissimilar said long chain satd. fatty acid radicals. The molar ratio of said dissimilar acid radicals to said long chain satd. fatty acid radicals ranges from about 0.1:7.9 to about 3:5. Moreover, the dissimilar acid radicals cannot consist solely of C2-C12 short chain satd. fatty acid radicals, C20 or higher long chain unsatd. fatty acid radicals, or a combination of said short chain satd. and said long chain unsatd. fatty acid radicals. Edible fat-contg. products (e.g. potato chips) contg. these nondigestible fat compns. can be less waxy tasting due to the lower level of solids required for passive oil loss control.

L1 ANSWER 5 OF 11 CAPLUS COPYRIGHT 1998 ACS ACCESSION NUMBER: 1994:481510 CAPLUS

ACCESSION NUMBER: 1994:481510 DOCUMENT NUMBER: 121:81510

TITLE: Nondigestible fat compositions

containing relatively small nondigestible solid

particles for passive oil loss control.

INVENTOR(S): Elsen, Joseph James; Kester, Jeffrey John; Lin,

Peter Yau Tak; Wehmeier, Thomas Joseph

PATENT ASSIGNEE(S): Procter and Gamble Co., USA

SOURCE: PCT Int. Appl., 92 pp.

CODEN: PIXXD2

PATENT INFORMATION: WO 9409641 A1 940511
DESIGNATED STATES: W: AU, CA, FI, JP, KR, NO, NZ

DESIGNATED STATES: W: AU, CA, FI, JP, KR, NO, NZ RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT,

LU, MC, NL, PT, SE

APPLICATION INFORMATION: WO 93-US10113 931021 PRIORITY APPLN. INFO.: US 92-969670 921030

DOCUMENT TYPE: Patent LANGUAGE: English

AB Nondigestible fats having relatively flat Solid Fat Content profile

slopes between room and body temp., are disclosed. These nondigestible fat comprise a liq. nondigestible and relatively small nondigestible particles dispersed in the oil to control passive oil loss. Edible fat-contg. products comprising these nondigestible fats can be less waxy tasting due to the lower level of solids required for passive oil loss control. Sucrose was reacted with Me esters of castor oil and hydrogenated rapeseed oil fatty acids, to give a solid sucrose polyester. A nondigestible fat substitute comprised 4 g of the above solid sucrose polyester and 96 g liq. sucrose polyester, prepd. by totally esterifying sucrose with cottonseed oil fatty acids.

ANSWER 6 OF 11 CAPLUS COPYRIGHT 1998 ACS

ACCESSION NUMBER:

1994:481509 CAPLUS

DOCUMENT NUMBER:

121:81509

TITLE:

Nondigestible fat compositions

containing solid polyglycerol ester particles

for passive oil loss control.

INVENTOR(S):

Howie, John Keeney

PATENT ASSIGNEE(S):

Procter and Gamble Co., USA

SOURCE:

PCT Int. Appl., 44 pp.

CODEN: PIXXD2

DATE NUMBER WO 9409638 A1 _____ 940511

PATENT INFORMATION: DESIGNATED STATES:

W: AU, CA, FI, JP, KR, NO, NZ

RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

APPLICATION INFORMATION: WO 93-US10110 PRIORITY APPLN. INFO.: US 92-968775

931021 921030

DOCUMENT TYPE:

Patent English

LANGUAGE: Nondigestible fat compns., useful as a replacement for triglyceride fats or oils in foods, are disclosed. The compns. have relatively flat Solid Fat Content (SFC) profile slopes between room and body temps. The nondigestible fat compns. comprise a liq. nondigestible oil, and nondigestible solid polyglycerol ester particles dispersed in the oil, in an amt. sufficient to control passive oil loss. ester groups of the solid polyglycerol ester particles comprise long-chain (C16-24) fatty acid radicals, with .gtoreq.40% of the long-chain fatty acid radicals being satd. and having at least 18 C atoms. Edible fat products contg. these nondigestible fat compns. can be less waxy tasting due to the lower level of solids required for passive oil loss control. Polyglycerol (av. d.p. 4.76) was esterified with a mixt. of palmitoyl chloride and stearoyl chloride, in DMF-pyridine. A fat substitute comprised 4 g of the above polyglycerol ester, dispersed in 96 g sucrose totally esterified with cottonseed oil fatty acids.

ANSWER 7 OF 11 CAPLUS COPYRIGHT 1998 ACS

ACCESSION NUMBER:

PATENT INFORMATION:

DESIGNATED STATES:

1994:481508 CAPLUS

DOCUMENT NUMBER:

121:81508

TITLE:

Nondigestible fat compositions

containing solid polyol polyester polymer for

passive oil loss control.

INVENTOR(S):

Corrigan, Patrick Joseph; Howie, John Keeney

Procter and Gamble Co., USA

PATENT ASSIGNEE(S):

PCT Int. Appl., 49 pp.

SOURCE:

CODEN: PIXXD2

NUMBER DATE wo 9409637 A1 _____ 940511 W: AU, CA, FI, JP, KR, NO, NZ RW: AT, BE, CH, DE, DK, ES, FR. GB, GR, IE, IT,

LU, MC, NL, PT, SE

APPLICATION INFORMATION: WO 93-US10108 931021 PRIORITY APPLN. INFO.: US 92-968791 921030

DOCUMENT TYPE: Patent LANGUAGE: English

Nondigestible fat compns., useful as replacements for triglyceride AΒ fats or oils in foods, are disclosed. These compns. have relatively flat Solid Fat Content (SFC) profile slopes between room temp. and body temp. The nondigestible fat compns. comprise a liq. nondigestible oil, and nondigestible solid polyol polyester particles dispersed in the oil in an amt. sufficient to control passive oil loss. The solid polyol polyester particles of the compn. comprise .apprx.1-100% polyol polyester polymer and from 0 to .apprx.99% polyol polyester monomer. The polyol polyester material which forms these solid particles must contain a relatively high proportion of long-chain satd. fatty acid ester groups. Edible fat-contg. products comprising these nondigestible fats can be less waxy tasting, due to the lower level of solids required for passive oil loss control. A solid sucrose polyester, comprising monomer and oligomers, was prepd. by reacting sucrose with Me esters of both behenic acid and dimerized distd. tallow fatty acids. This solid polyester (4 g) was dispersed in 96 g liq. sucrose polyester, in which sucrose was totally esterified with cottonseed oil fatty acids. Cthe resulting nondigestible fat compn. had a SFC profile slope of -0.1.

L1 ANSWER 8 OF 11 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD

ACCESSION NUMBER: 94-166989 [20] WPIDS

DOC. NO. CPI:

C94-076476

TITLE:

Nondigestible fat compsns., comprising small nondigestible particles - of polyol polyester dispersed in a liq. nondigestible oil, provide passive oil loss control without being excessively

waxy tasting..

DERWENT CLASS: D13 E13

INVENTOR(S): ELSEN, J J; KESTER, J J; LIN, P Y T; WEHMEIER, T J

PATENT ASSIGNEE(S): (PROC) PROCTER & GAMBLE CO

COUNTRY COUNT: 27

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG

WO 9409641 A1 940511 (9420)* 93

RW: AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE

W: AU CA FI JP KR NO NZ

AU 9454472 A 940524 (9434)

US 5422131 A 950606 (9528) 43

FI 9502048 A 950428 (9529)

CN 1087787 A 940615 (9531)

EP 666711 A1 950816 (9537) EN

R: AT BE CH DE DK ES FR GB GR IE IT LI LU NL PT SE

NO 9501605 A 950630 (9538)

JP 08502658 W 960326 (9644) 96

EP 666711 B1 970423 (9721) EN 50

R: AT BE CH DE DK ES FR GB GR IE IT LI LU NL PT SE

NZ 257733 A 970424 (9723)

DE 69310196 E 970528 (9727)

ES 2100579 T3 970616 (9731)

AU 682477 B 971009 (9749)

TW 327127 A 980221 (9830)

APPLICATION DETAILS:

PATENT NO KIND

APPLICATION

DATE

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WO	9409641	A1	WO	93-US10113	931
ΑU	9454472	A	WO	93-US10113	931021
			AU	94-54472	931021
US	5422131	A	US		921030
FI	9502048	A	WO	93-US10113	931021
			FI	95-2048	950428
CN	1087787	A	CN		931030
EP	666711	A1	EP	93-924989	931021
			WO	93-US10113	931021
NO	9501605	A	WO	93-US10113	931021
			NO	95-1605	950427
JP	08502658	W	WO	93-US10113	931021
~ -			JP	94-511182	931021
EΡ	666711	B1	EΡ	93-924989	931021
			WO		931021
NZ	257733	A	NZ	93-257733	931021
			WO	93-US10113	931021
DE	69310196	E	DE	93-610196	931021
			EP	93-924989	931021
			WO	93-US10113	931021
ES	2100579	Т3	EP	93-924989	931021
AU	682477	В	AU	94-54472	931021
TW	327127	A	TW	93-109771	931120

FILING DETAILS:

PATENT NO F	CIND	PATENT NO
AU 9454472	A Based on	WO 9409641
EP 666711	Al Based on	WO 9409641
JP 08502658	W Based on	WO 9409641
EP 666711	B1 Based on	WO 9409641
NZ 257733	A Based on	WO 9409641
DE 69310196	E Based on	EP 666711
	Based on	WO 9409641
ES 2100579	T3 Based on	EP 666711
AU 682477	B Previous Pub	1. AU 9454472
	Based on	WO 9409641

PRIORITY APPLN. INFO: US 92-969670 921030 AB WO 9409641 A UPAB: 940705

A nondigestible fat compsn., useful as a replacement for triglyceride fats or oils in foods, has a solid fat content profile slope between 21.1 deg.C and 37 deg.C of 0 to minus 1.26% solids/deg.C.

The compsn. comprises: A) a liq. nondigestible oil having a complete m.pt. below 37 deg.C; and B) nondigestible particles, having a complete m.pt. of 37-500 deg.C, dispersed in the oil in an amt sufficient to control passive oil loss upon the ingestion of the compsn.; the particles not consisting solely of polyol polyesters where the polyol moiety has at least 4 hydroxyl gps., at least 4 of the hydroxyl gps. being esterified, and where the ester gps. comprise a combination of: (1) 12C or higher unsaturated fatty acid radicals, 2-12C satd. fatty acid radicals of mixts. of these; and (2) 20C or higher satd. fatty acid radicals; where the molar ratio of (1):(2) radicals is 1:15-2:1 and at least 15 wt.% of the fatty acid radicals forming the combination are 20C and higher satd. fatty acid radicals.

The nondigestible particles are characterised by at least one of the following: (a) having a thickness of 1 micron or less, pref. 0.1 micron or less; (b) imparting to the compsn. an Oil Sepn. Valve of 16g or less; and (c) imparting to the compsn. a Thixotropic Area Valve of 10 kPa/sec. or less. USE/ADVANTAGE - Edible fat-contg. prods. comprising the non-digestible fat compsns. are less waxy

tasting, due to the lower level of slids required for passive oil loss control.

Dwg.0/10

L1 ANSWER 9 OF 11 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD

ACCESSION NUMBER: 94-166988 [20] WPIDS

CROSS REFERENCE: 95-336222 [43] DOC. NO. CPI: C94-076475

TITLE: Nondigestible fat compsns. used as a passive oil

loss control agent - contain cocrystallised blend of poly ol polyester hardstock and crystal modifier resulting in less waxy tasting edible fat-contg.

prods..

DERWENT CLASS: D13 E13

INVENTOR(S): JOHNSTON, R W; LIN, P Y T; MEAD, M L; DESAI, N P;

HEINTZ, R A; SOON-SHIONG, P

PATENT ASSIGNEE(S): (PROC) PROCTER & GAMBLE CO; (VIVO-N) VIVORX INC

COUNTRY COUNT: 25

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG

WO 9409640 A1 940511 (9420)* 75

RW: AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE

W: AU CA FI JP KR NO NZ

AU 9455382 A 940524 (9434) FI 9502047 A 950428 (9529)

EP 666713 A1 950816 (9537) EN

R: AT BE CH DE DK ES FR GB GR IE IT LI LU NL PT SE

NO 9501604 A 950630 (9538) AU 668630 B 960509 (9626)

EP 666713 B1 960724 (9634) EN 43

R: AT BE CH DE DK ES FR GB GR IE IT LI LU NL PT SE

DE 69303828 E 960829 (9640)

JP 08502657 W 960326 (9644) 81

ES 2091115 T3 961016 (9647)

CN 1089781 A 940727 (9713)

NZ 257945 A 970324 (9719)

AU 687728 B 980305 (9820)#

APPLICATION DETAILS:

PAT	TENT NO I	KIND	API	PLICATION	DATE
WO AU	9409640 9455382	A1 A	WO	93-US10112 93-US10112 94-55382	931021 931021 931021
FI	9502047	A		93-US10112 95-2047	931021 950428
ΕP	666713	A1	WO EP	93-US10112 94-900371	931021 931021
NO	9501604	A	WO NO	93-US10112 95-1604	931021 950427
	668630	В		94-55382	931021
EP	666713	B1	WO EP	93-US10112 94-900371	931021 931021
DE	69303828	Е	WO	93-603828 93-US10112 94-900371	931021 931021 931021
JP	08502657	W		93-US10112 94-511181	931021 931021
ES	2091115	Т3	EP	94-900371	931021
CN NZ	1089781 257945	A A		93-120714 93-257945 93-US10112	931030 931021 931021

FILING DETAILS:



PATENT NO PATENT NO KIND

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ΑU	9455382	Α	Based on		WO	9409640
EΡ	666713	A1	Based on		WO	9409640
ΑU	668630	В	Previous	Publ.	ΑU	9455382
			Based on		WO	9409640
ΕP	666713	В1	Based on		WO	9409640
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			Based on		WO	9409640
JP	08502657	W	Based on		WO	9409640
ES	2091115	Т3	Based on		ΕP	666713
ΝZ	257945	A	Based on		WO	9409640
ΑU	687728	В	Previous	Publ.	ΑU	9334200
			Based on		WO	9415589

PRIORITY APPLN. INFO: US 92-969607 921030; AU 93-34200 921230 WO 9409640 A UPAB: 951109

A nondigestible fat compsn. useful as a replacement for triglyceride fats or oils in foods, and characterised by a solid fat content profile slope between 21.1-37 deg.C of 0-1.26% solids/C, comprises: (a) a liq. nondigestible oil having a complete melting pt. below 37 deg.C; and (b) nondigestible solid particles diposed in (a) in an amt. sufficient to control passive oil loss when ingested. The particles have (c) a complete melting pt above 37 deg.C and (d) a thickness of 1 micron or less, pref. 0.1 micron or less. The particles consist of a cocrystallised blend of: (e) a nondigestible solid polyol fatty acid polyester hardstock having a complete melting pt above 37 deg.C and normally tending to form spherulitic particles having a dia of 3 microns or larger when crystallised in (a); and (f) a crystal modifier capable of inducing hardstock to form non-digestable particles having a thickness of 1 micron or less, pref. 0.1 micron or less when cocrystallised with the hardstock in (a).

The ratio of the hardstock to crystal modifier in the cocrystallised blend ranges from 95:5 to 20:80, pref from 95:5 to 25:75.

Also claimed, a process for preparing a nondigestible fat compsn. useful as a replacement for triglyceride fats or oils in foods, which involves forming a melted mixt. which comprises: (a)' part (a) (b)' a cocrystallisable blend consisting of part (e) and part (f).

The melted mixt. is cooled so that the cocrystallisable blend forms nondigestible particles dispersed in the liq. nondigestible oil. The fat compsn. formed has a solid fat content profile slope between 21.1-37 deg.C of from 0-1.26% solids/deg.C. The nondigestible particles have (c) and (d). They are dispersed in the compsn. in an amt. sufficient to control passive oil loss when ingested.

Also claimed, a thickness digestible oil prod. comprising (a)'' a liq. digestible triglyceride oil; and (b)'' from 2-20% of nondigestible solid particles dispersed in digestible triglyceride oil. The particles have (c) and (d). They consist of a cocrystallised blend of (e); and (c)'' a crystal modifier capable of inducing the hardstock to form nondigestible particles having a thickness of 1 micron or less, when cocrystallised with the hardstock on the digestible oil. The ratio of hardstock to crystal modifier in the cocrystallised blend ranges from 95:5 to 20:80.

USE/ADVANTAGE - Useful for replacing trilgyceride fats or oils in foods. Used as thickening agents in shortenings, margarines, mayonnaise, frozen dairy desserts and the like. The relatively small non-digestible particles provide efficient passive oil loss control

without being excessively waxy tasting. The levels of solids required to achie this, pref. less than 15% of to nondigestible fat, is significantly less than other prior art methods. Dwg.0/10

ANSWER 10 OF 11 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD

94-166987 [20] WPIDS ACCESSION NUMBER:

C94-076474 DOC. NO. CPI:

Non-digestible fat compsns. contg. diversely TITLE:

esterified polyesterpolyol - used for passive oil loss control resulting in edible food prods. Which are less waxy tasting, useful as replacements for

tri glyceride fats or oils in food.

A97 D13 E19 DERWENT CLASS:

AU 681867 B 970911 (9745)

A1 980417 (9826)

CORRIGAN, P J; HOWIE, J K; LIN, P Y T; KEENEY, H J INVENTOR(S): PATENT ASSIGNEE(S):

(PROC) PROCTER & GAMBLE CO; (CORR-I) CORRIGAN P J;

(HOWI-I) HOWIE J K; (LINP-I) LIN P Y T 27

COUNTRY COUNT:

PATENT INFORMATION:

PA?	TENT NO KIND	DATE	WEEK	LA	PG			
 WO	 9409639 A1	940511	(9420)		39	-		
***	RW: AT BE CH					LU MC	NL PT SE	Ξ
	W: AU CA F	JP KR	NO NZ					
ΑU	9454100 A	940524	(9434)					
FI	9502046 A	950428	(9529)					
NO	9501603 A	950630	(9538)					
US	5480667 A	960102	(9607)		18			
JP	08502656 W	960326	(9644)		41			
CN	1090133 A	940803	(9713)					
NZ	257473 A	970324	(9719)					
ΕP	788314 A1	970813	(9737)	EN				
	R: AT BE CH	I DE DK	ES FR (B GR	IE IT	LI LU	NL PT SE	3

APPLICATION DETAILS:

SG 47637

PATENT NO KIND APPLICATION DATE					
WO	9409639	A1	WO	93-US10111	931021
ΑU	9454100	A	WO	93-US10111	931021
			AU	94-54100	931021
FI	9502046	A	WO	93-US10111	931021
			FI	95-2046	950428
NO	9501603	A	WO	93-US10111	931021
			ИО	95-1603	950427
US	5480667	A Cont of	US	92-968780	921030
			US	94-321381	941011
JΡ	08502656	W	WO	93-US10111	931021
			JΡ	94-511180	931021
CN	1090133	A	CN	93-119796	931030
NZ	257473	A	NZ	93-257473	931021
			WO	93-US10111	931021
ΕP	788314	A1	ΕP	93-924398	931021
			WO	93-US10111	931021
ΑU	681867	В	ΑU	94-54100	931021
SG	47637	A1	SG	96-3297	931021

FILING DETAILS:

PAT	TENT NO	KIN	D		PAT	TENT NO
	0454100					9409639
ΑU	9454100	А	Basea	on	WU	9409639

JP 08502656 W Based on WO 9409639 NZ 257473 A Ba d on WO 9409639 Al Ba ed on WO 9409639 EP 788314 AU 9454100 AU 681867 B Previous Publ. Based on WO 9409639

PRIORITY APPLN. INFO: US 92-968780 921030; US 94-321381 941011 WO 9409639 A UPAB: 940705

The compsn. has a solid fat content profile slope between 21.1-37 deg.C of 0 to 1.26% solids per deg.C. It comprises: (a) a liq. nondigestible oil having a m.pt. below 37 deg.C; and (b) nondigestible solid particles of polyol polyester material dispersed in (a) in an amt. to control passive oil loss when ingested. The ester gps. forming the polyol polyester material consist of (i) at least 15%, ester gps. formed from 20-26C satd. fatty acid gps., and (ii) other ester gps. formed from fatty or other organic acid radicals which are different to the long chain satd. fatty acid radicals.

The molar ratio of the dissimilar radicals to the long chain satd. fatty acid gps. is 0.1:7.9-3:5, provided that the dissimilar radicals do not comprise solely of 2-12C short chain fatty acid gps., 12C or higher long chain unsatd. fatty acid gps., or a combination of short chain satd. and long chain unsatd. fatty acid gps.

USE/ADVANTAGE - Used as a replacement for triglyceride fats or oils in food. Also used as thickening agents. The nondigestible fat compsns. have advantages over known intermediate melting polyol polyesters. As the relatively small nondigestible particles provide efficient passive oil loss control, the level of solids can be reduced to less than 15% of the nondigestible fat, resulting in less waxy tasting prods. Dwq.0/0

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ACCESSION NUMBER: 94-166985 [20] WPIDS

96-299895 [30]; CROSS REFERENCE: 96-333206 [33]

DOC. NO. CPI: C94-076472

TITLE: Non-digestible fat replacement for tri glyceride

fats and oils - comprises liq non-digestible oil and non-digestible solid particles of poly ol

polyester dispersed in the oil.

DERWENT CLASS: A23 A97 D13

CORRIGAN, P J; HOWIE, J K INVENTOR(S): (PROC) PROCTER & GAMBLE CO PATENT ASSIGNEE(S):

COUNTRY COUNT:

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LΑ PG

WO 9409637 Al 940511 (9420)* 50

RW: AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE

W: AU CA FI JP KR NO NZ

AU 9454099 A 940524 (9434) CN 1086387 A 940511 (9529)

FI 9502043 A 950428 (9529)

A1 950816 (9537) EP 666710 ΕN

R: AT BE CH DE DK ES FR GB GR IE IT LI LU NL PT SE

NO 9501600 A 950630 (9538)

JP 08502654 W 960326 (9644) TW 289728 A 961101 (9710) NZ 257472 A 970324 (9719) 51

EP 666710 B1 970820 (9738) ΕN 24

R: AT BE CH DE DK ES FR GB GR IE IT LI LU NL PT SE

DE 69313296 E 970925 (9744)

AU 682014 B 970918 (9746)

APPLICATION DETAILS:

PAT	TENT NO	KIND	APPLICATION DAT		
WO	9409637	A1	WO	93-US10108	931021
ΑU	9454099	A		93-US10108	931021
				94-54099	931021
	1086387	A		93-119798	
FΙ	9502043	A		93-US10108	931021
				95-2043	950428
ΕP	666710	A1		93-924397	
				93-US10108	931021
ИО	9501600	A		93-US10108	931021
			ИО	95-1600	950427
JP	08502654	W	WO	93-US10108	931021
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TW	289728	A		93-109782	
ΝZ	257472	A	NZ	93-257472	
				93-US10108	931021
ΕP	666710	B1	EΡ	93-924397	931021
			WO	93-US10108	931021
DE	69313296	E	DE	93-613296	931021
			EΡ	93-924397	931021
			WO	• • • • • • • • • • • • • • • • • • • •	931021
	682014	В	ΑU	94-54099	
ES	2105342	Т3	EΡ	93-924397	931021

FILING DETAILS:

PATENT NO K	IND	PATENT NO
AU 9454099	A Based on	WO 9409637
EP 666710	Al Based on	WO 9409637
JP 08502654	W Based on	WO 9409637
NZ 257472	A Based on	WO 9409637
EP 666710	Bl Based on	WO 9409637
DE 69313296	E Based on	EP 666710
	Based on	WO 9409637
AU 682014	B Previous Publ.	AU 9454099
	Based on	WO 9409637
ES 2105342	T3 Based on	EP 666710

PRIORITY APPLN. INFO: US 92-968791 921030 AB WO 9409637 A UPAB: 960829

A non-digestible fat compsn. useful as a replacement for triglyceride fats or oils in foods having a solid fat content (SFC) profile slope at 21.1-37 deg.C of 0-(-1.26)% solids/deg.C comprises: (A) a liq. non-digestible oil of complete m.pt. below 37 deg.C; and (B) non-digestible solid particles of polyol polyester dispersed in the oil in an amt. sufficient to control passive oil loss upon ingestion of the compsn.

The solid particles have a complete m.pt. above 37 deg.C and the polyester material comprises 1-100 (esp. 10-100, more esp. 50-100)% of a polyol polyester polymer and 0-99 (esp. 0-50)% of a polyol polyester monomer component. At least 15 (esp. 45, more esp. 75, most esp. 90)% of the hydroxyl gps. of the polyester material are esterified with 20C (esp. 22C) long chain satd. fatty acid radicals.

The non-digestible fat compsn. comprises 60-99 (esp. 80-99)% liquid non-digestible oil and 1-40 (esp. 1-20)% solid polyol polyester. The polyol polyester polymer component comprises 2-12 (esp. 2-4) monomeric units. The polyol moiety is derived from a sugar or sugar alcohol having 6-8 (esp. 8)-OH gps. The solid

particles have a thickness of less than 1 (esp. 0.1) micron. The particles comprise 40-60% of a polyol polyester more component. The solid particles are esp. derived from sucrose and at least 75% of the -OH gps. of the polyester are esterified with long chain satd. fatty acid radicals. The polyester polymer component has a number average mol.wt. of 4,000-36,000 (esp. 5000-12,000). The liquid non-digestible oil is a liquid sucrose fatty acid.

USE/ADVANTAGE - Edible fat-contg. prods. contg. the non-digestible fats are less waxy tasting due to lower levels of solids required for passive oil loss control. The edible substrate is esp. a potato chip and contains 10-100% of the non-digestible fat compsn. The blends of liquid polyol polyesters and solid polyol polyester exhibit little or no phase sepn. of the hardstock particles and it is possible to reduce the level of solid polyol polyester hardstock required for control of passive oil loss. The solid polyol polyesters can also be used as thickening agents in margarines, mayonnaise, dairy desserts (frozen) etc.